

**METHOD FOR USING AN ACCESS CARD TO CREATE  
A SECURE SUB-NETWORK ON A PUBLIC NETWORK**

**Abstract**

10       A method for creating a secure sub-network on a public network that includes a set of devices. The secure sub-network is to include a subset of devices from among the set of devices. An access card is provided having a first private key comprised thereon. The access 15 card is scanned to determine the first private key, by the subset of devices. A master device is determined from among the subset of devices. A second private key is selected and a public key is computed based on the second private key, by the master device. The second 20 private key is only known to the master device. The public key is sent to the set of devices, by the master device. A shared encryption key is computed, and an encryption is requested of any subsequent messages between any of the devices comprising the subset of 25 devices using the shared encryption key.